



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/713,648
Source: IFWP
Date Processed by STIC: 9/17/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

~~TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER~~
~~VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND~~
~~TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:~~

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebs/efs/downloads/documents.htm>) , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
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IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/713,648

DATE: 09/17/2004

TIME: 11:51:54

Input Set : A:\20010-04USA.ST25.txt

Output Set: N:\CRF4\09172004\J713648.raw

pr 4, 7, 11, 12, 20, 26, 30

4 <110> APPLICANT: POSCO
 5 POSTECH
 6 An, Gynheung
 7 Ryu, Choong-Hwan
 8 Han, Jong-Jin
 9 Kang, Hong-Gyu
 10 An, Kyungsook
 12 <120> TITLE OF INVENTION: ORGAN PREFERENTIAL GENES IDENTIFIED BY T-DNA INSERTIONAL
 13 MUTAGENESIS OF RICE
 15 <130> FILE REFERENCE: 20010-04USA
 17 <140> CURRENT APPLICATION NUMBER: US 10/713,648
 18 <141> CURRENT FILING DATE: 2003-11-14
 20 <150> PRIOR APPLICATION NUMBER: 60/427,166
 21 <151> PRIOR FILING DATE: 2002-11-15
 23 <160> NUMBER OF SEQ ID NOS: 83
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0

**Does Not Comply
 Corrected Diskette Needed**

ERRORED SEQUENCES

104 <210> SEQ ID NO: 5
 105 <211> LENGTH: 6721
 106 <212> TYPE: DNA
 107 <213> ORGANISM: Oryza sativa
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 110 <221> NAME/KEY: misc_feature
 111 <222> LOCATION: (1311)...(1400)
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P.4

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hard return

Input Set : A:\20010-04USA.ST25.txt

Output Set : N:\CRF4\09172004\J713648.raw

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228 <211> LENGTH: 232

229 <212> TYPE: DNA

230 <213> ORGANISM: Oryza sativa

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W--> 233 <221> NAME/KEY: misc_feature

W--> 234 <222> LOCATION: (1)...(101)

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240 aggattcgtc tcctctcctt ttgtttcatg atcctgtctg tgtgtgattc tggacttctg 180

241 gtgctaagtc tgggtgttgt tatgggtgtg ttgggattgg gcagtggtga gc 232

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244 <211> LENGTH: 246

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249 <221> NAME/KEY: misc_feature

250 <222> LOCATION: (148)...(246)

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256 accaattaat gtttgatgtt catttcattc aaacacggat ccgaggtagc aggtaccagg 180

257 tgagttccat tcttactacc acggtgctat ttttttgct atgtggctaa ttacatgact 240

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707 <212> TYPE: DNA

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711 <221> NAME/KEY: misc_feature

712 <222> LOCATION: (0)...(0)

713 <223> OTHER INFORMATION: line 1B-138-07 - genomic DNA without T-DNA insert

715 <221> NAME/KEY: misc_feature

716 <222> LOCATION: (1310)...(1311)

717 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted

718 to create line 1B-138-07

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723 ggccctccgc ggccctccat ggccgcgcgc ctctccaccg ccgcgcgcgc ctctgtggtc 180

724 tccgacagcg cctcgtctcc ggtaagcacc cgccgcgcgc tcatccattc ccaatttccc 240

725 atccgtgtga agtgtgattg acctctctct ctctctcact ctcccggcgc agcctagggg 300

726 gcgcctcctc atcggcgggg agttcgtcga gtcgcggggc gacgagcacg tcgacgtcac 360

727 caatccggta aagcccgcgc tgagcctccc cacgatcgat cgatttggga ggtgtggtgt 420

728 gggggcatgt gacagtgatt ctctgggtgt gcgcaggcga cgcaggaggg ggtgtcgcgc 480

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775 cctgatgctg accgagatgc cacactgaat gcccttattg ctgctggttt tgggtgctgct 3300
776 gggcaagggt gtatggcatt gagcactgct gtttttgttg gaggttcaga gccatggtat 3360
777 atacttctgt cctgtttgtt tcttcaggat aagacctggc attaggtaat gaagtataaa 3420

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Input Set : A:\20010-04USA.ST25.txt

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780 ctgctttttt accaacgaaa aggttggtga cctgatttta agtaacctaa atatgaagtg 3600
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insert a
hard
return

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829 tcgcagaagt gaggtgaaaa aaaagaaagg catcttgtag gttcttcatt tgcccattca 6540
830 tggaaataga cacatgcacc aatgcgaaat gaacagaaga ataatcgata ggcgcgggat 6600
E--> 831 gccatgccat gccaataaag gtagctggtc t 6631<210> 23
      832 <211> LENGTH: 3937
      833 <212> TYPE: DNA
      834 <213> ORGANISM: Oryza sativa
W--> 836 <220> FEATURE:
W--> 837 <221> NAME/KEY: misc_feature
W--> 838 <222> LOCATION: (0)...(0)
W--> 839 <223> OTHER INFORMATION: line 1D-059-12 - genomic DNA without T-DNA insert
W--> 841 <221> NAME/KEY: misc_feature
W--> 842 <222> LOCATION: (530)...(531)
W--> 843 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
      844 to create line 1D-059-12
E--> 846 <210> SEQ ID NO:
W--> 846 <400> 23
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848 taaaaaccct atatttgatt tattttaata tgctcagaca acgaaacaac cgattttaca 120
849 ttttttgagg atttgcttaa tataataaag ttcaggccca catgacagcg ggagattagt 180
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851 aaaacccccg agctgtcctc gtaaaaccct aacaccttct cccccaaatt cgctagagcc 300
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862 ttagattttt tagagtgaag tttgttgctc atattgacaa tgtcagctta aattccaata 960
863 ccatgttttt tttttcgccc cctttaactg tttttttgac aggggaagaa gttggtagat 1020
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914 <210> SEQ ID NO: 24

915 <211> LENGTH: 6809

916 <212> TYPE: DNA

917 <213> ORGANISM: Oryza sativa

919 <220> FEATURE:

920 <221> NAME/KEY: misc_feature

921 <222> LOCATION: (0)...(0)

922 <223> OTHER INFORMATION: line 1C-087-40 - genomic DNA without T-DNA insert

924 <221> NAME/KEY: misc_feature

925 <222> LOCATION: (2666)...(2667)

926 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted

927 to create line 1C-087-40

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DATE: 09/17/2004

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TIME: 11:51:54

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W--> 1055 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
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insert a
hard return

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1082 atgtgcacat gccacgcgag gaagaggatt aaggcccccct ttgattcaaa ggaaattcat 1440
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 1151 <223> OTHER INFORMATION: line 1C-038-56 - genomic DNA without T-DNA insert
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 1154 <222> LOCATION: (125)...(126)
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1191 gcatgtaaat actatttaga aaatagctgt ttaaattggat atagctagta tttgggtttg 1980
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1435 <212> TYPE: DNA

1436 <213> ORGANISM: Oryza sativa

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1440 <222> LOCATION: (0)...(0)

1441 <223> OTHER INFORMATION: line 1C-109-51 - genomic DNA without T-DNA insert

1443 <221> NAME/KEY: misc_feature

1444 <222> LOCATION: (6570)...(6571)

1445 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted

1446 to create line 1C-109-51

1448 <400> 30

OK

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1526 agagtgcagg ccgtctctta cgagcgttgt ttgagatagt tctgaagaga ggatgggccc 4680
1527 aactagcaga gaaggctttg aatctttgta agatgataga taagcagatg tggaatgtcc 4740
1528 aaactccctt gcgtcaattc cctgggtattc cgaaggaaat cctaataaaa ctggagaaaa 4800
1529 aagaattggc ttgggagagg tactacgacc tatcatctca ggaaattggg gaactaattc 4860
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1582 ctttggggat ctttatttag tagcctatgg ctgtgcttct tgtgatcatc cttcttattg 8040
E--> 1583 tgtttttgtc ttcctgtttc atcaaagcaa gtcactaacg ttttgattct tat 8093<210> 31

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insert a
hard
return

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1584 <211> LENGTH: 1383
1585 <212> TYPE: DNA
1586 <213> ORGANISM: Oryza sativa
W--> 1588 <220> FEATURE:
W--> 1589 <221> NAME/KEY: misc_feature
W--> 1590 <222> LOCATION: (0)...(0)
W--> 1591 <223> OTHER INFORMATION: line 1C-056-07 - genomic DNA without T-DNA insert
W--> 1593 <221> NAME/KEY: misc_feature
W--> 1594 <222> LOCATION: (516)...(517)
W--> 1595 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
1596 to create line 1C-056-07
E--> 1598 <210> SEQ ID NO:
W--> 1598 <400> 31

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1619 aaacttcctt tctgtgtagt gcatacggaa tttttctac tactaggatg tcacgcaagt 1260
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1622 gtg 1383

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1624 <210> SEQ ID NO: 32
 1625 <211> LENGTH: 7726
 1626 <212> TYPE: DNA
 1627 <213> ORGANISM: Oryza sativa
 1629 <220> FEATURE:
 1630 <221> NAME/KEY: misc_feature
 1631 <222> LOCATION: (0)...(0)
 1632 <223> OTHER INFORMATION: line 1C-100-32 - genomic DNA without T-DNA insert
 1634 <221> NAME/KEY: misc_feature
 1635 <222> LOCATION: (5051)...(5052)
 1636 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
 1637 to create line 1C-100-32
 1639 <400> 32
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 1642 gatgaagaag aaagaggctg gcaaaaaaaaaa ggccgaaagt aaagtaagggt gaagaccgat 180
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 1647 gccacaaca ccggcgggtgc ccagcacccc atgtggaaga ccagcctctg ctccttcttc 480
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1710 cccaaatata agaagtcatg cttattgttc aggtagtacc tcattctcaa atagatgggtg 4260
1711 ctttagaatg tgcctatca aacctcataa acttttgggtg gagaatataa aaaattaata 4320
1712 cattaagact tctcatgtca aaatgacatt agtagatctg tgacatctgt catgaaaaat 4380
1713 atatttttag tagttttgaa aaacataata ctataataag tactggttca aagggtgcgtg 4440
1714 acaaggggaa agaaggatta taacatcaag aatcaaaatg cattgtatac tacgagtcct 4500
1715 gtagatcaca tcagtgcatt acatgttcct actggcagta ttgtctgact tcctatgttc 4560
1716 aggtttgtct cacaggtgtt gatgatgcag taatgaaaga tgaatttgac aagttgaccg 4620
1717 ttgccctgca acaaggagca gcaacatgct cacctccatt acctctaaca actatagtag 4680
1718 tgcaagtaag tttgagttct ttgtctggaa gtaagacttc tatttatagt ttctccatt 4740
1719 gcctcaacat ttcagcttgt ctaaactgac cactcttata agttttatta ctttatactg 4800
1720 tagatgtctt gctgtcctgt aactcaatat gctaccact aatatctagg agttaccatt 4860
1721 gtactaaaaa tgtataaaac atggttgata ggagttcaga aagtgcattt atctgggtac 4920
1722 atccgatcac tggtagaata tgttaccact tgaaccaaac tttatgtaat ttataatggt 4980
1723 atatttgcaa ctacggaatc ttttactgct atgcaggat cacaaaggaa tttcaaagtc 5040
1724 tgcaccagct gattgtccat tgatccact attggtgcca aaagtagatc aatcagaagg 5100

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1728 acccttgctg gtgattgggc caacctcaat tcgggcacat tactttttga cgtatgttgt 5340
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1731 gctctttatt aacttatgta gaattttgga aatgtcatgg tagagaagtc aatgaatgat 5520
1732 ttagcgaatt ccttgtaaaa tgtgcagggt gttggaatcg aaatgaatga atcagcagtt 5580
1733 tctgatgctg agagaaatgc gctcattaac ggtgtatcaa attgtcgctt tgtctgtggg 5640
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1735 actgtagcca ccatggtgtc aatcctattc agtttttctt atgtcctact ttatatactc 5760
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1767 gctactcatt ggctgcatct ggtaaaggat ggcctaacat agactaataa atatctaaat 7680
E--> 1768 gcatggagat ggagtcaatt tcttgtgggtg ccactagac aagaaa 7726<210> 33
1769 <211> LENGTH: 2417
1770 <212> TYPE: DNA
1771 <213> ORGANISM: Oryza sativa
W--> 1773 <220> FEATURE:
W--> 1774 <221> NAME/KEY: misc_feature

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insert a
hard
return

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W--> 1775 <222> LOCATION: (0)...(0)

W--> 1776 <223> OTHER INFORMATION: line 1C-142-27 - genomic DNA without T-DNA insert

W--> 1778 <221> NAME/KEY: misc_feature

W--> 1779 <222> LOCATION: (2020)...(2021)

W--> 1780 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted

1781 to create line 1C-142-27

E--> 1783 <210> SEQ ID NO:

W--> 1783 <400> 33

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1786 acctcaccta atgtcaaaaag aaaccaacgg caggaggagg gagacacctc gaggaacca 180
1787 cagcacccaa agaacaagaa aggcgatacc ccttctccca ccaccaccgt ttccgtccat 240
1788 ctccatcctc accgcggcg acgtcacct cgcgcgacc atcggcgacc tgcctcagcc 300
1789 atggcaatgg cttacaagat ggtaatccag tctgtcacac acctgggtta ttgagtcctat 360
1790 gggtcgtcgt cgttgccggc ttctgatgga gtatgtgggt tgggtgcgtc tgtgcaggcg 420
1791 acggagggga tgaacgtgaa ggaggagtgc cagaggtggt tcatggagat gaagtggag 480
1792 aaggtgcacc ggttcgtggt gtacaagatc gacgagcgtt cgcgcgccgt gctggtggac 540
1793 aaggtggcg gccccggcga agggtagcag gagctcgtcg ccgcgctgcc caccgacgac 600
1794 tgcgcgtacg ccgtcttcga cttcgacttc gtcaccgtcg acaactgcc aagagcaag 660
1795 atcttcttca tcgcctggta attaatatc ccaaccagc tctcctctc aattaatctc 720
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1801 tgcactaatg aagaactcta agttcatgca attacacaat gtacgcgcaa cttacttaat 1080
1802 acctaaacct cgattgatca tagtcgtttc gtaccataag aaaagatgtc acatatcaca 1140
1803 atcactcatc gcgtcatgat tgagaaatca aattaattct ggcaccttac atactattgt 1200
1804 acactggcag acaagtcctc ctgagcctta ttaggtgctg acgagcatca taaaaacgac 1260
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1808 tgttaatcac tgttctcttt agtacacttc atgcataatt ttgcttaatt aacctccact 1500
1809 gccaggcccg gttcttttat cagatctgat ctggcctgaa tccacctgtt gtcgatctgt 1560
1810 ctgtccttgt atattcatag atccatcatc aaaagcaagg ttcgtgcgca cccacgccag 1620
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1826 <210> SEQ ID NO: 34
 1827 <211> LENGTH: 4941
 1828 <212> TYPE: DNA
 1829 <213> ORGANISM: Oryza sativa
 1831 <220> FEATURE:
 1832 <221> NAME/KEY: misc_feature
 1833 <222> LOCATION: (0)...(0)
 1834 <223> OTHER INFORMATION: line 1C-140-04 - genomic DNA without T-DNA insert
 1836 <221> NAME/KEY: misc_feature
 1837 <222> LOCATION: (773)...(774)
 1838 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
 1839 to create line 1C-140-04
 1841 <400> 34
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 1843 ttttcttatt taagatatag aattttacatc gggttttcatt aacaagcttt aattttcacct 120
 1844 ctgaatccaa aattctccaa attatctcca ctctccatcc tctaatacaa taagaacaag 180
 1845 cagcccttct aaaaaaaaaat aaaaagaaaag aaaaagaaaag aaaaaaaaaa gaaagaagaa 240
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 1847 atggcgaccg gagagctcgc tctcgtgtcc tcgctgttca tcgctcgtcg gttcctcttg 360
 1848 cttggtgctg tggcgagaga ggcttctgcg ctaccccggc atgacttccc cgagggtctc 420
 1849 gtcttcggcg caggctcctc cgctttccag gtatatatac ataaaatcca tcgatcatgc 480
 1850 atgtcagaag ctcatcatgc tcagatgctc atcctgctca cgtcfaatgc tcatgctctg 540
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 1852 tatgccaaga tatgtgctta ctaccgtgtg agcaatgctg ttcaagaact gaatttgttt 660
 1853 ttgcaaatgt gtcacacctg gagtaggtgg aaggggcagc tgcagaggat gggaggaagc 720
 1854 ccagcatttg ggacaccttc atccatcaag gtccaaaaaa atggagtaga tgataatctt 780
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 1877 gcaggcaatt caaggaggcc agatagggat cactctcatg gttcggtggc atgagccata 2160

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1878 caccgacaaa acagccgatg cagctgctgc cattaggatg aatgaattcc atattggatg 2220
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1923 cgccggaggc aggcgcgacg tgggaacgtg gctgtctgct gacgacatga ccagtgtcag 4920
1924 accggttaca aatcggtcat t 4941
2390 <210> SEQ ID NO: 47
2391 <211> LENGTH: 6534

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2393 <213> ORGANISM: Oryza sativa
2395 <220> FEATURE:
2396 <221> NAME/KEY: misc_feature
2397 <222> LOCATION: (0)...(0)
2398 <223> OTHER INFORMATION: line 1C-109-51 coding sequence
2400 <400> SEQUENCE: 47
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2406 gccagagtgc aggtcagcgt cctctcgctc accgacgacg tcgtctacaa gcccagacc 360
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insert a
hard
return

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TIME: 11:51:54

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4139 artificial sequence

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4190 agcaggagaa gcacgtaaac cttgaaacat actaagttcc acagtcgaga gtaaaccgta 2700
4191 atcaacacaa gaaacaaaca taaaattgaa caaacgcgca tattataagt gacgaagcgg 2760
4192 tctcacataa aacagggcac acaggttaca acaacgaggg ttgtaagccc attagcccc 2820
4193 aaacatcaga tcaccacaag caaatgtctc gaagacacac gcacacggca acaggataac 2880

```

RAW SEQUENCE LISTING

DATE: 09/17/2004

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Input Set : A:\20010-04USA.ST25.txt

Output Set: N:\CRF4\09172004\J713648.raw

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4194 tccacactgg cagatcatgg gatagcagca gttatcaatc aggccttgac acacagaaca 2940
4195 tcaagcccc agacgacgac gactcctcta gatcccggtc ggcactctact ctattccttt 3000
4196 gccctcggac gagtgctggg gcgtcggttt ccactatcgg cgagtacttc tacacagcca 3060
4197 tcggtccaga cggccgcgct tctgcgggcg atttgtgtac gcccgacagt cccggctccg 3120
4198 gatcggacga ttgcgtcgca tcgacctgc gcccaagctg catcatcgaa attgccgtca 3180
4199 accaagctct gatagagttg gtcaagacca atgcggagca tatacgcccc gagccgcggc 3240
4200 gatcctgcaa gctccggatg cctccgctcg aagtagcgcg tctgctgtct catacaagcc 3300
4201 aaccacggcc tccagaagaa gatgttggcg acctcgtatt gggaaatccc gaacatcgcc 3360
4202 tcgctccagt caatgaccgc tgttatgcgg ccattgtccg tcaggacatt gttggagccg 3420
4203 aaatccgcgt gcacgaggtg cgggacttcg gggcagtcct cggcccaaag catcagctca 3480
4204 tcgagagcct gcgcgacgga cgcactgacg gtgtcgtcca tcacagtttg ccagtgtac 3540
4205 acatggggat cagcaatcgc gcatatgaaa tcacgccatg tagtgtattg accgattcct 3600
4206 tgcggtccga atgggcccga cccgctcgtc tggctaagat cggccgcagc gatcgcatcc 3660
4207 atggcctccg cgaccggctg cagaacagcg ggcagttcgg ttccaggcag gtcttgcaac 3720
4208 gtgacacctt gtgcacggcg ggagatgcaa taggtcaggc tctcgtgtaa tcccccaatg 3780
4209 tcaagcactt ccggaatcgg gagcgcgccg gatgcaaagt gccgataaac ataacgatct 3840
4210 ttgtagaaac catcggcgca gctatttacc cgcaggacat atccacgcc tctacatcg 3900
4211 aagctgaaag cacgagattc ttcgcccctc gagagctgca tcaggtcgga gacgtgtcg 3960
4212 aacttttcga tcagaaactt ctgcacagac tcgcggtga gttcaggctt ttcatatct 4020
4213 cattgcccc cggtatccgt cgagtcagcc tgaaaggaca aaatacatgt tagcgctta 4080
4214 gtggtacatt attatttcag tacagcaaga taacacaatt caaaagactg acccataata 4140
4215 aataactagt cctcaattta aaatttgagt tctaaatag acatctatga atatgctgta 4200
4216 catcggcact acagaaaata cgattcccaa taattgaaca attgtacttt atttagttgt 4260
4217 tactacaaca atggaagata caagatcggt tcaaaactac catacatgca tggagtattt 4320
4218 gttccacaga tctggaaaaa acagatctga cgggcagtggt caccaaacac tagacatatg 4380
4219 tatttgattt aggtggatga cgtgtacaaa catgactacc agatctagaa ttagaacgcg 4440
4220 gcgtgctttg gaaatgttaa gtagatccaa atacatcggg aacaaatgaa catattcata 4500
4221 tgacatagct gtaaaacatc atgatctatc atatcaacta gaggggatct cggcatgtat 4560
4222 cattctattg catctagaac catagcattt ccattgtgaca acaattttg aaacatacat 4620
4223 tgctcagatc taccataaga acaccatggt catgacagca tcgaccatga tttccacatt 4680
4224 taacagcatc ccgaggtcag atccagtgtt tagaactatc atttcagcaa aattcacaaa 4740
4225 ataaatcctc caattcgctt acatatatcc attccacgca tctaggacc agatccacca 4800
4226 taccagtata caccgaacta aacatttca tcagatccgc taactacgac agagaaaaacg 4860
4227 cagatccaga caaccagatc caccgacaaa taaacacagc cccccacatc caacaaccgc 4920
4228 gaatccaccc agatctgacc cagaagcagg cacgaagaac acggggggtg agggagatgg 4980
4229 gacgcggatc caagcttggc ggcggtattg gttgatgctg cgacggcggc ggagaaggga 5040
4230 gagaggggag agggagaaaa gcgcggaggc gcggagagag gcgagtacga agacgccttt 5100
4231 ctctgcgttg tctcggtta gggtttgca tccccgact ccgcccgttt tatagggcca 5160
4232 gacagcctgg acctctcagg agcgggaagcg aagggatggg ggagtttttc gttttacccc 5220
4233 ctttgacgtc ttcaaaatc actcgcattc cacatcgtgc ctgcaaaggc cgggtgggtg 5280
4234 gatcatatcg agaataattt ataagttagg gagctttctg ataatatcca ccgcaaggag 5340
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4236 tgggtccaga ggcttccttc gtgtgcggtt agcagtgca cgcgtcgctc caagaaaaag 5460
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4238 tgggcccacg ttacagctgg gtcccacata tcgggtgggtg cgatgagttg ttcggtgcgt 5580
4239 aggagtagat tggatcccaa cgggtggttg cgtcgtcggc ggccctgccg attttatttt 5640
4240 cgatttttga aatgcgagag cgggagaacg gcaccgttg cttggctgtg gatgccgtta 5700
4241 gccgcaccgg actattcggc ccagttccat tttggcccaa cttgaaacag cgcggagcac 5760
4242 aagacggggg agcccattha ggcccgaat ctacgcctg tagaaagtcc gtgtcgttgc 5820

```

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Input Set : A:\20010-04USA.ST25.txt

Output Set: N:\CRF4\09172004\J713648.raw

4243 gatggaccag aaagcccata aaccttggag gcgttctctg ctgggaataa aataagttca 5880
 4244 cactctgtcc ctcaacttta cgtcgagttt gtttgacatc gctaagccc agtaccagaa 5940
 4245 atcttggata caaataaggt ttgatataaa gtggcacgtg gtgaatggca tcgtttgaaa 6000
 4246 aatcttcaga tcgagcgggc ttcacaagcc gtaagtgcaa gtgccaaaat ttgtgaagaa 6060
 4247 aattacttcc ttcatttcac aatgtaagtt attttagcat tttccacatt catattgata 6120
 4248 tcaataaatt tagatagata tatatgtctg aattcgtacc gttaacgagc tctagaagct 6180
 4249 tcagtactac gcgtctcgag aattcgtac attaaaaacg tccgcaatgt gttattaagt 6240
 E--> 4250 **tgtctaagcg tcaatttgtt tacaccacaa tatatcctgc ca** 6282<210> 70
 4251 <211> LENGTH: 43
 4252 <212> TYPE: DNA
 4253 <213> ORGANISM: Artificial Sequence
 W--> 4255 <220> FEATURE:
 W--> 4256 <223> OTHER INFORMATION: synthetic oligonucleotide
 E--> 4258 <210> SEQ ID NO:
 E--> 4258 <400> SEQUENCE: 70
 4259 gggctcgacga ggtacaaggt acaaggtaca gacttgtatc ctt 43
 E--> 4261 <210> SEQ ID NO: 71
 4262 <211> LENGTH: 50
 4263 <212> TYPE: DNA
 4264 <213> ORGANISM: Artificial Sequence
 4266 <220> FEATURE:
 4267 <223> OTHER INFORMATION: synthetic oligonucleotide
 4269 <400> SEQUENCE: 71
 4270 cgggtaccac ctgcatataa cctgcatata acctgcacat tagcaataaa 50

Insert a
hard
return

VERIFICATION SUMMARY

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Input Set : A:\20010-04USA.ST25.txt

Output Set: N:\CRF4\09172004\J713648.raw

L:227 M:254 E: No. of Bases conflict, LENGTH:Input:6 Counted:6723 SEQ:5
 L:227 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:227 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6721 Found:6723 SEQ:5
 L:232 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:233 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:234 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:235 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:237 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:237 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:5 differs:6
 L:243 M:214 E: (33) Seq.# missing, SEQ ID NO:6
 L:473 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18
 L:510 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19
 L:577 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
 L:671 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:21
 L:720 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:22
 L:831 M:254 E: No. of Bases conflict, LENGTH:Input:23 Counted:6633 SEQ:22
 L:831 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:831 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6631 Found:6633 SEQ:22
 L:836 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:837 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:838 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:839 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:841 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:842 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:843 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:846 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:846 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23
 L:846 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:22 differs:23
 L:914 M:214 E: (33) Seq.# missing, SEQ ID NO:23
 L:929 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:24
 L:1043 M:254 E: No. of Bases conflict, LENGTH:Input:25 Counted:6811 SEQ:24
 L:1043 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:1043 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6809 Found:6811 SEQ:24
 L:1048 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:1049 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1050 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1051 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1053 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1054 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1055 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1058 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:1058 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:25
 L:1058 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:24 differs:25
 L:1143 M:214 E: (33) Seq.# missing, SEQ ID NO:25
 L:1158 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:26
 L:1209 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:27
 L:1298 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:28
 L:1369 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:29

VERIFICATION SUMMARY

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Output Set: **N:\CRF4\09172004\J713648.raw**

L:1448 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:30
 L:1583 M:254 E: No. of Bases conflict, LENGTH:Input:31 Counted:8095 SEQ:30
 L:1583 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:1583 M:252 E: No. of Seq. differs, <211> LENGTH:Input:8093 Found:8095 SEQ:30
 L:1588 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:1589 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1590 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1591 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1593 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1594 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1595 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1598 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:1598 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:31
 L:1598 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:30 differs:31
 L:1624 M:214 E: (33) Seq.# missing, SEQ ID NO:31
 L:1639 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:32
 L:1768 M:254 E: No. of Bases conflict, LENGTH:Input:33 Counted:7728 SEQ:32
 L:1768 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:1768 M:252 E: No. of Seq. differs, <211> LENGTH:Input:7726 Found:7728 SEQ:32
 L:1773 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:1774 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1775 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1776 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1778 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1779 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1780 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1783 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:1783 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:33
 L:1783 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:32 differs:33
 L:1826 M:214 E: (33) Seq.# missing, SEQ ID NO:33
 L:1841 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:34
 L:2509 M:254 E: No. of Bases conflict, LENGTH:Input:48 Counted:6536 SEQ:47
 L:2509 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:2509 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6534 Found:6536 SEQ:47
 L:2514 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:2515 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:2516 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:2517 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:2519 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:2519 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:47 differs:48
 L:2531 M:214 E: (33) Seq.# missing, SEQ ID NO:48
 L:4145 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:69
 L:4250 M:254 E: No. of Bases conflict, LENGTH:Input:70 Counted:6284 SEQ:69
 L:4250 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:4250 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6282 Found:6284 SEQ:69
 L:4255 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:4256 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:4258 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:4258 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:69 differs:70

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L:4261 M:214 E: (33) Seq.# missing, SEQ ID NO:70